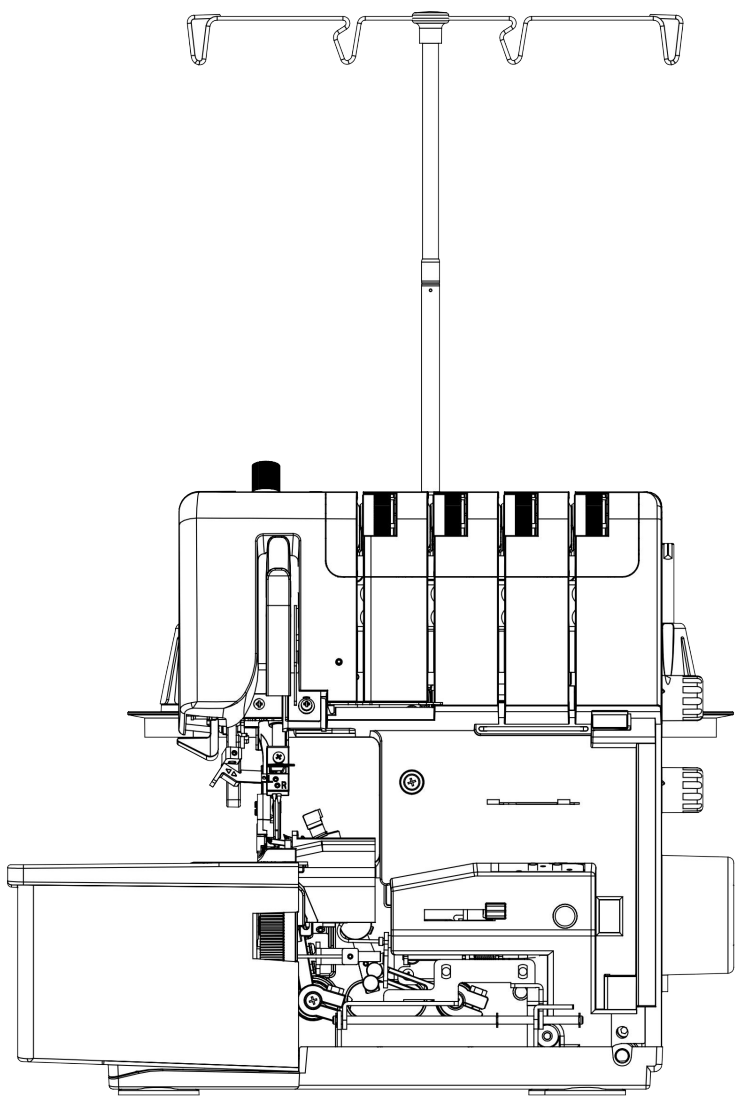

User manual

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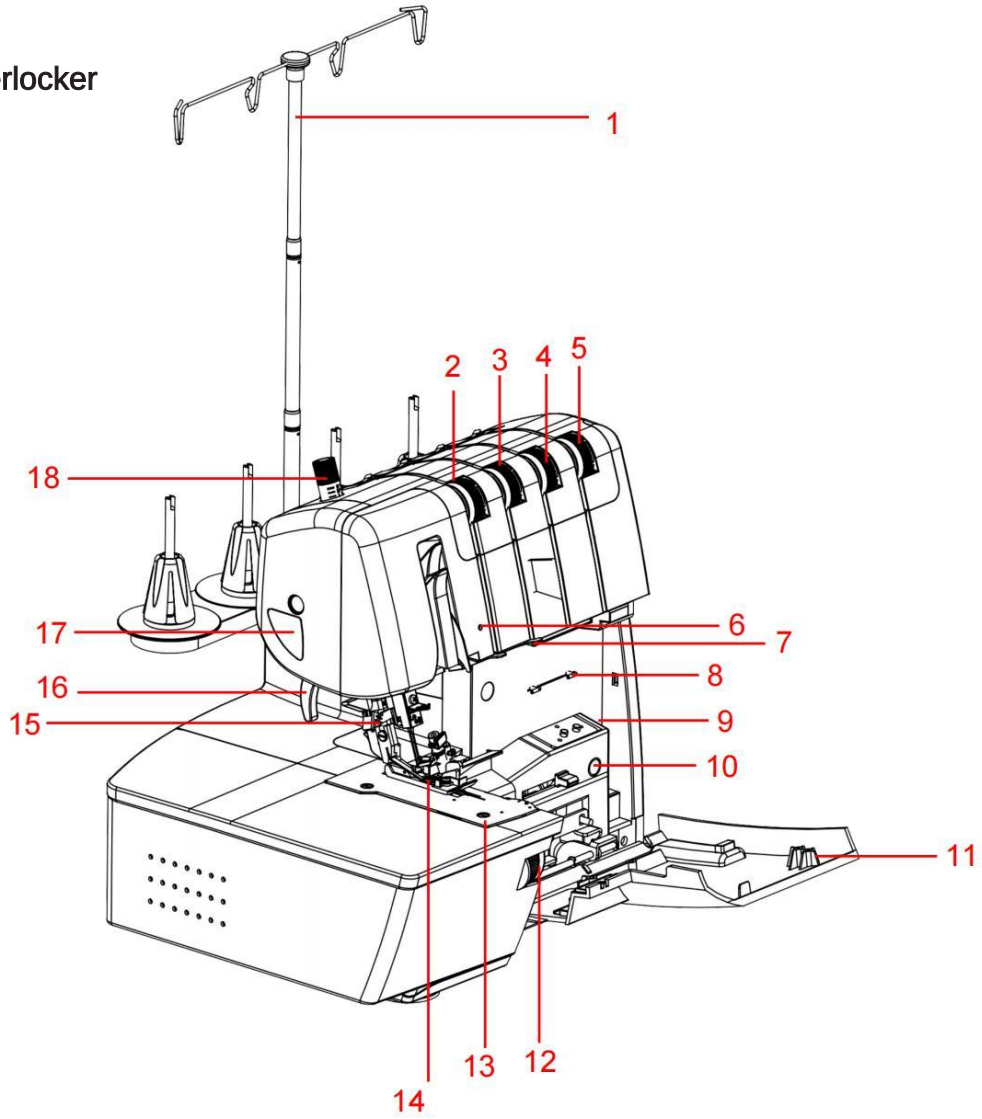

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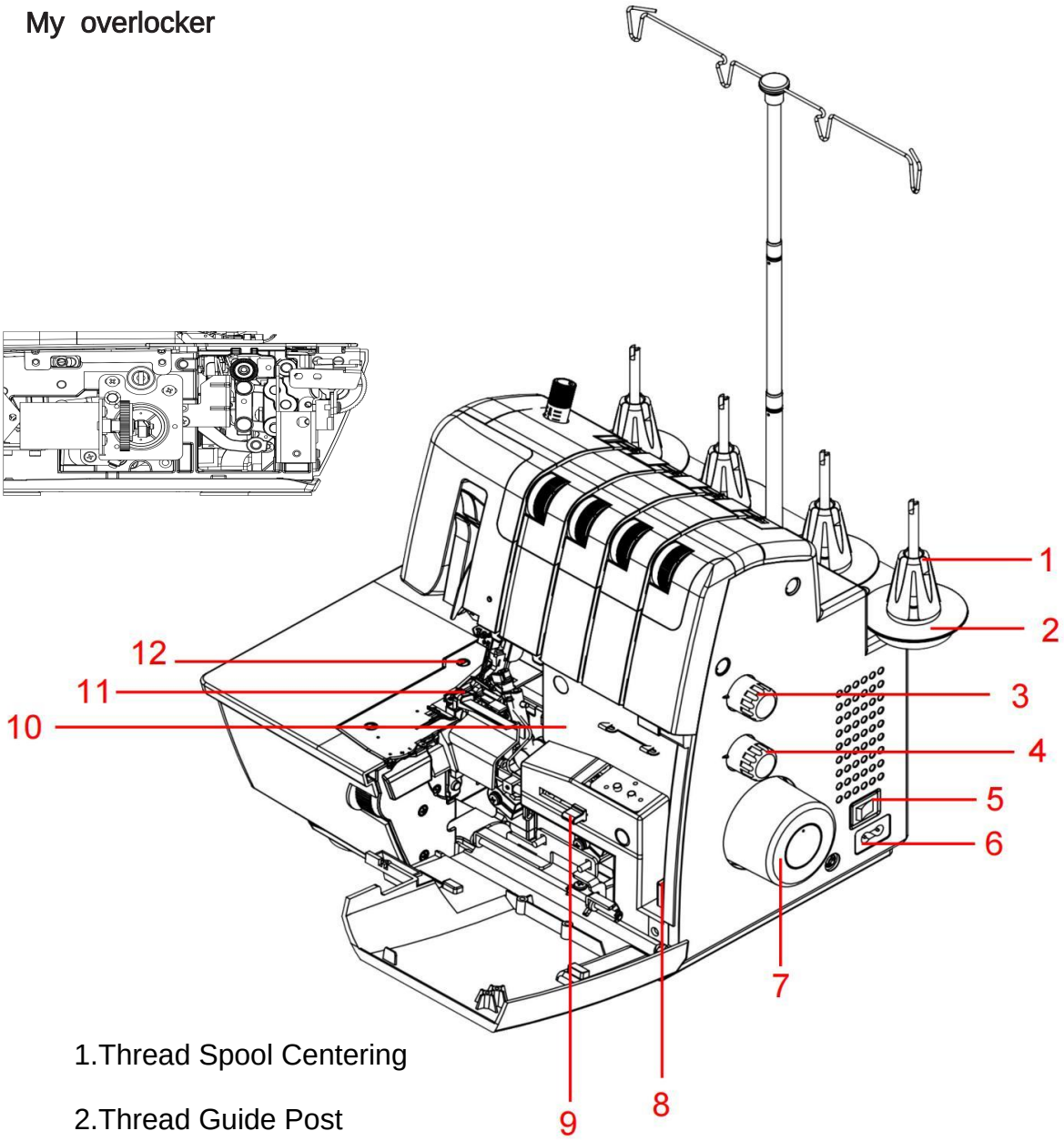
My overlocker



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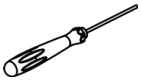
05.Hex screwdriver (1.5 mm) 

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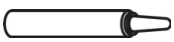
10.Oiler 

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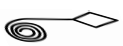
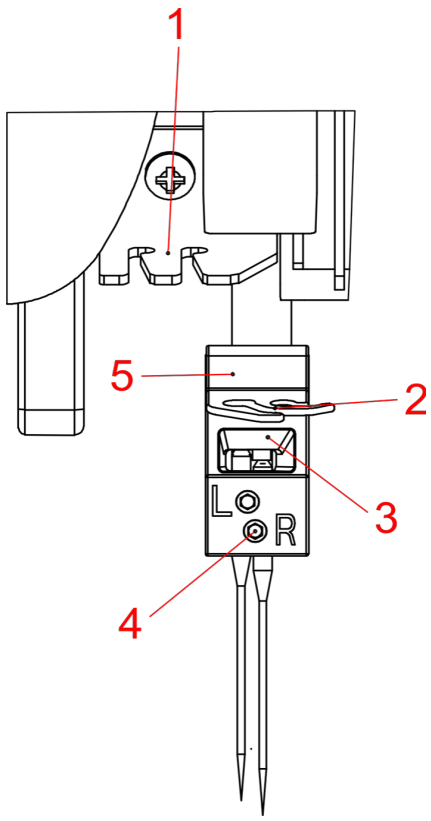
19. Looper cleaner 



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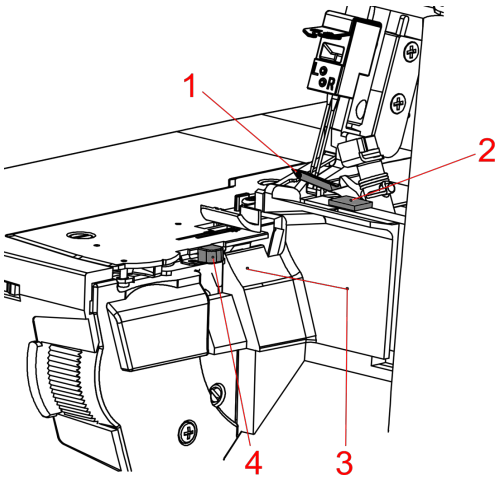

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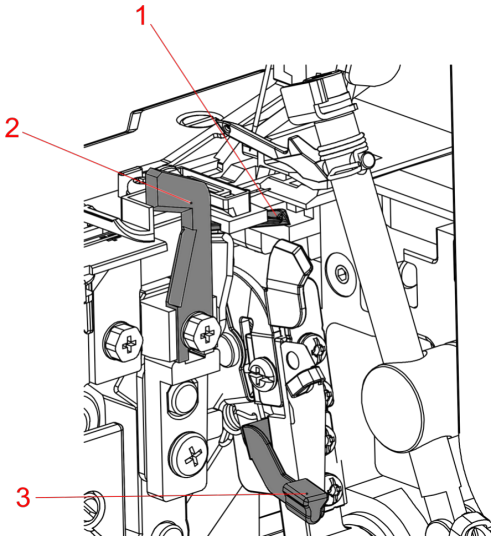

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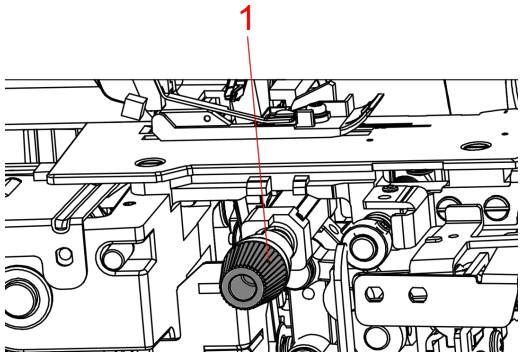

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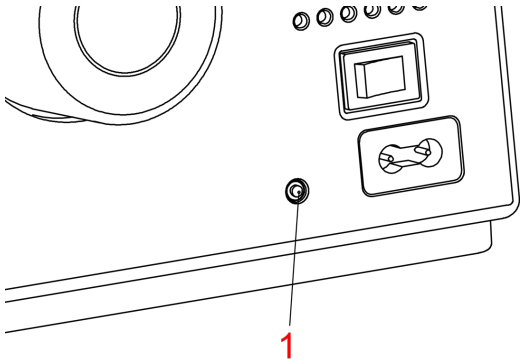

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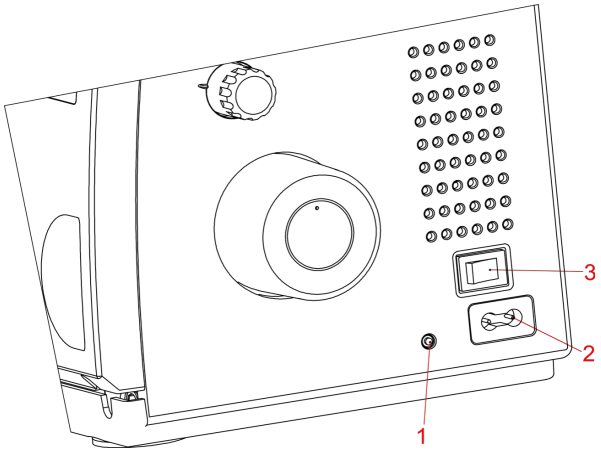
Foot control and power cord

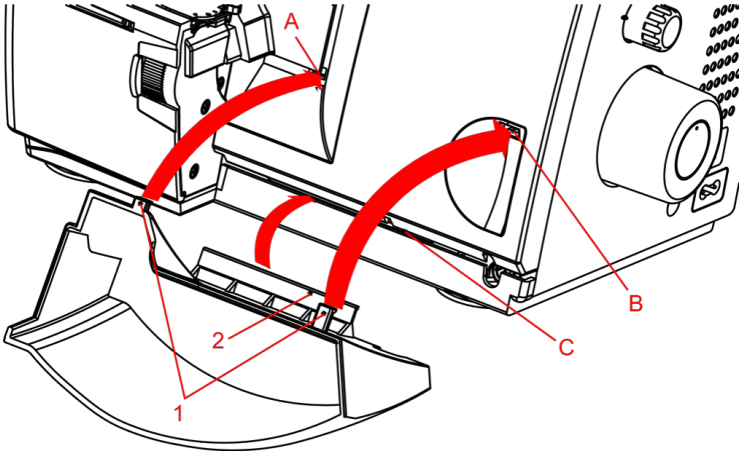


1.Insert the plug of the foot control into the respective sockets (1).

2.Insert the plug of the power cord into the respective sockets (2).

3.The power switch (3) turns the machine and the sewing lighton /off.

Remove the cutt-offs bin



Make sure that the looper cover is closed before you attach the cut - offs bin.

Clip the cut - offs bin into the openings on the looper cover . Itcatches the cutoff fabric as you sew. This keeps your working area neat and tidy.

Position the connection bar (2) in the opening (C) . Insert thetwo pins (1) into the respective openings (A,B) and let it snapinto place.

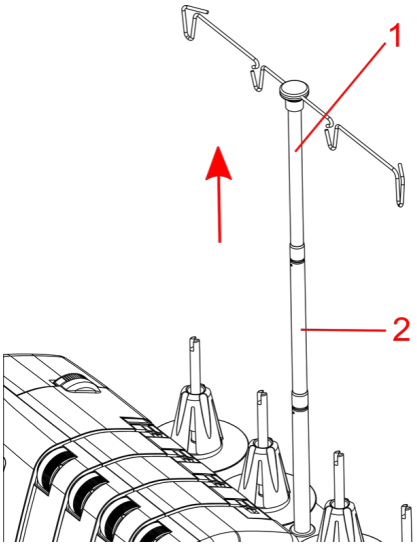
When storing the machine , leave the cut-offs bin

attached forstoring the foot control.

1 Upper pins

2 Lower pin

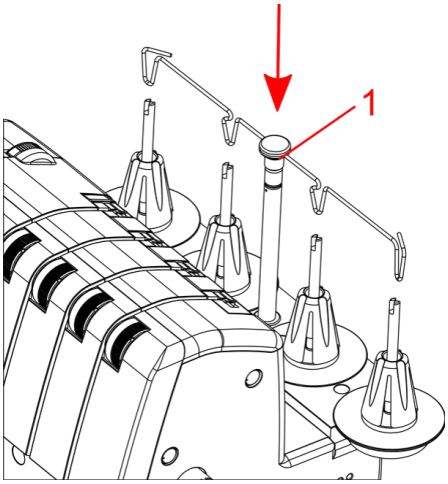
Retractable Top Thread Guide



1.Pull up the retractable thread stand fully, turning it slightly until the two positioning pins engage . This will align the Thread Guide (1) parallel to the Thread Stand.

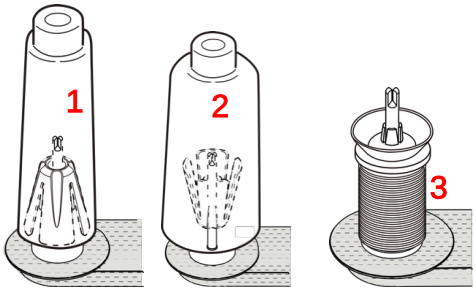
2.Make sure the lower part of the telescopic support rod (2) is pulled out of thehousing all the way to achieve the optimum height.

3.When storing the overlock machine , the base of the retractable thread stand can be pushed back into the housing.



1Thread Guide

Spool Stabilizer



Spool stabilizer for cones

With small cones the Spool stabilizer (1) is used with the narrow end upwards.

With large cones the Spool stabilizer (2) is used with the narrow end downwards.

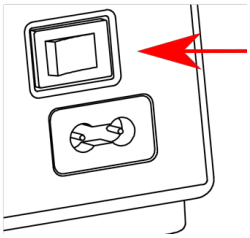
1 small thread cone with Spool stabilizer

2 large cone with Spool stabilizer upside down

3 Thread spool

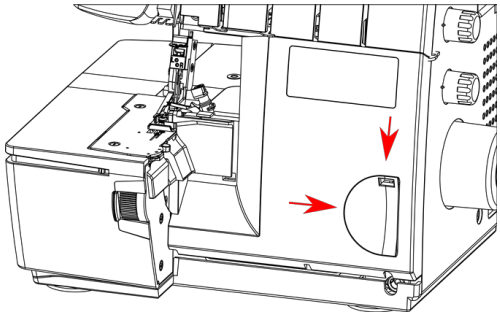
3.Operating Instructions

Power switch



The power switch controls both the machine power and the sewing light. When leaving the machine unattended, or servicing the machine, switch the machine off, and removethe power cord from the wall outlet.

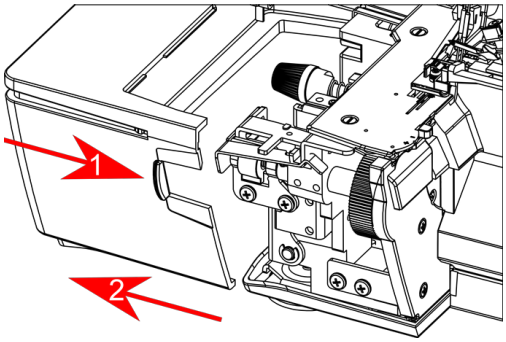
Looper cover



To open the looper cover, pull it to the right and flip it down-wards.

To close the looper cover, flip it upwards and push it to the left.It engages automatically.

Sewing table



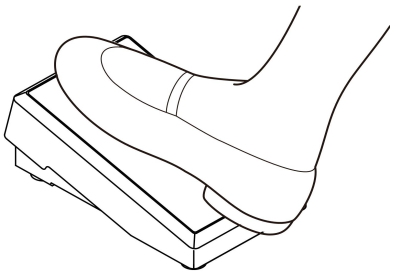
To open the sewing table , hold onto the grip near the cutting width dial (1) and push it to the left (2).

To close the sewing table, swivel it to the right until it engages.

1.Grip on the sewing table

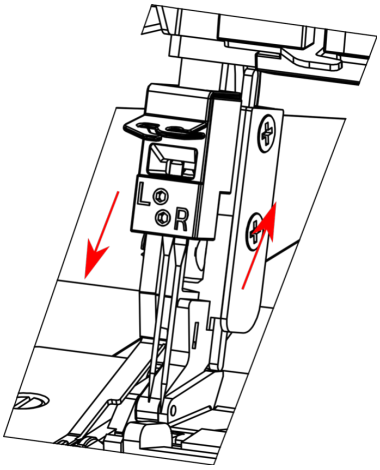
2. Opening the sewing table

Foot control



The pressure on the foot control regulates the sewing speed.

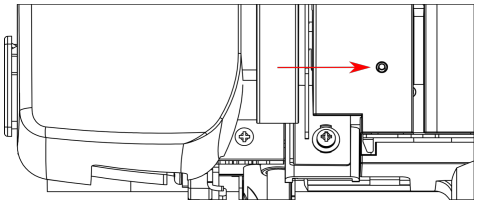
Needle up/down



After sewing, the needle always stops at its highest position.

Adjust the up/down position of the needle by sinking the heel back on the foot control.

Safety LED



If overheating should occour, the motor will be cut off and the Safety LED will flash.

When the Safety LED is activated, the machine will not run.
Reasons and actions:

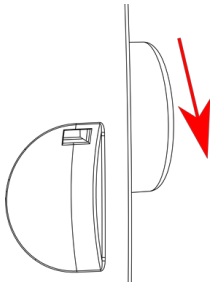
1.The looper cover is open.

2.The sewing table is open.

3.The presser foot is up.

Switch off the machine for 10 - 15 Minutes to cool down.
Afterwards sewing can be continued.

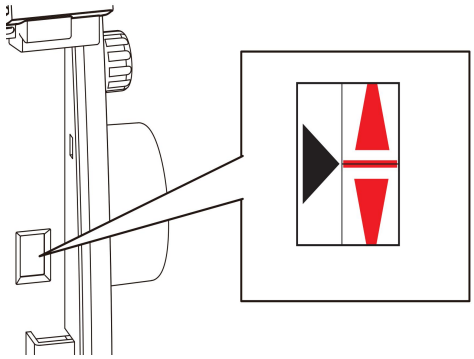
Handwheel and handwheel position indicator window



1.The handwheel turns counter-clockwise.

2.Open the looper cover to check the handwheel position indicator. Then set the hand

.wheel to threading position.

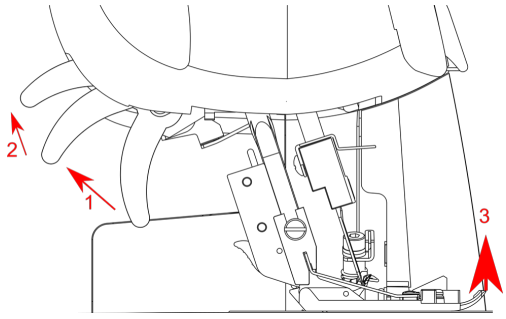


The needle and the looper are at the threading position

(high) , when the red bar on the handwheel is aligned with

the black triangle in the handwheel position indicator.

Two step presser foot lifter with front foot lift



1.To raise the presser foot, push up the presser foot lifter

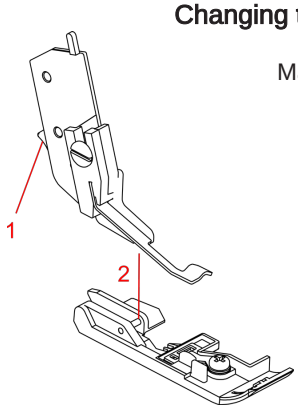
until it engages (1).

2.Press the presser foot lifter even further (2) for an extra

raise of the presser foot and to lift the tip (front foot lift)(3).

1 Lifter position 1
2 Front foot lift 3

Changing the presser foot



Make sure that the needle is in the highest position.

1.Raise the presser foot.

2.Press the presser foot release lever (3) to release the presser foot and remove

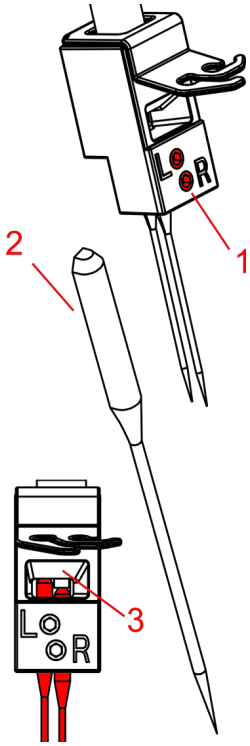
it.

3.To attach the foot, place it under the shaft.

4.The groove in the shaft must line up exactly with the presser foot pin (4).

5.Lower the shank and the presser foot engages.

Needle installation



1.Raise the needle bar to its highest position by turning the handwheel counter-clock-wise.

2.Loosen the needle set screw and remove the needle. In doing so, use the 1.5mm hex screw driver which is provided in the looper cover.

3.Insert the new needle (flat side to the back) into the needle holder and push it all the way up. Use the needle checking window (3) to check the needle position.

4.Tighten the set screw.

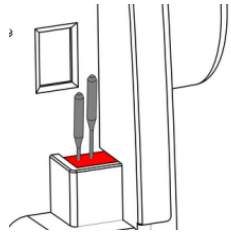
1 Set screws

2 Needle (flat side to the back)

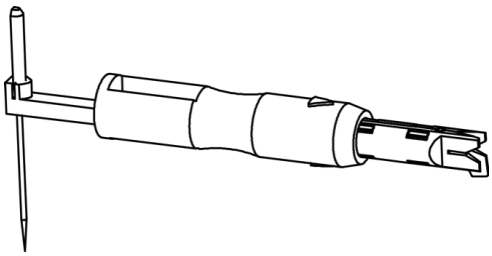
3 Needle checking window

Needle pad

In the practical needle cushion, you can store needles temporarily when only one of the inner ones is used or when special needles are used.

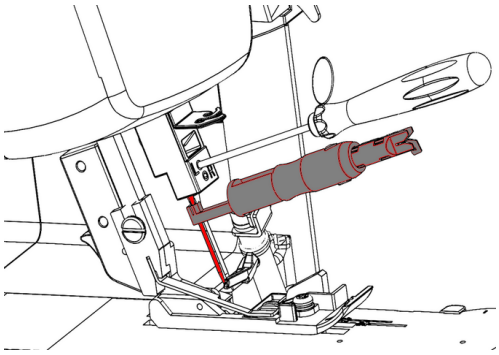


Needle Threader



To handle the needle conveniently, use the needle threader / inserter included in the accessory

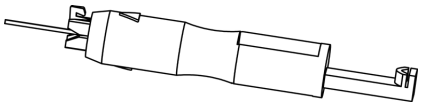
Slide the needle threader over the needle before loosening the set screw to prevent the needle from falling.



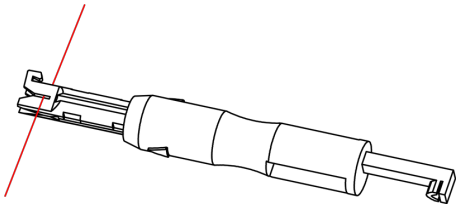
The new needle is held by the needle threader when inserting and tightening the screw.

Make sure that the flat side of the needle points to the rear. The needle must be in its highest position.

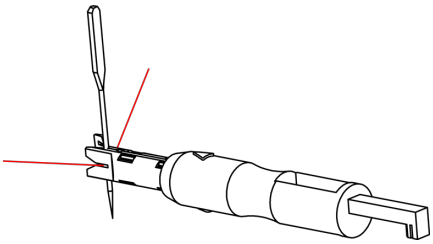
Threading the needle



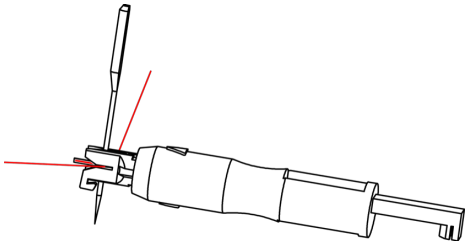
A. Metal tongue in the Y - shaped threader



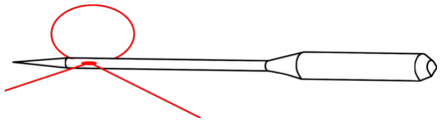
B. Hold the needle threader with the triangular marking facing up and pass the thread horizontally through the Y - shaped slot.



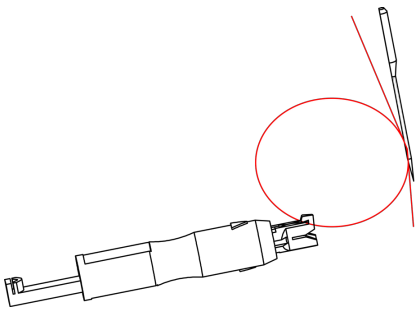
C. Gently pull on the end of the thread, press the nose of the needle threader onto the needle shaft and start to slide down. Please note: Only press the threader lightly and gently against the needle so as not to damage the metal tongue.



D. When you have reached the eye of the needle, press so that the Y - shaped metal tongue passes through the eye and the thread is taken along.



E. When you slowly pull back the needle threader, a loop of thread remains behind the needle.

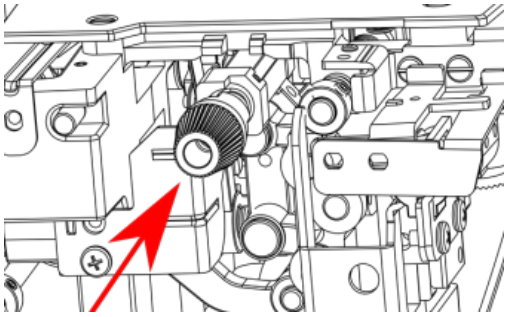


F. Pull the end of the thread completely through the eye and place the end of the thread under the presser foot.

Knife

Deactivating the knife

Open the sewing table and the looper cover.
Press the knife activating knob on/off (1) und turn clockwise until the knife engagesat the lower position.
Close the sewing table and the looper cover.



Activating the knife

1
Open the sewing table and the looper cover.
Press the knife activating knob on/off (1) und turn counter-clockwise until the knife engages at the upper position.
Close the sewing table and the looper cover.

When working with lowered knife,make sure that the fabric edge is not wider than the selected cutting width. Otherwise the upper looper and the needle can be damaged.

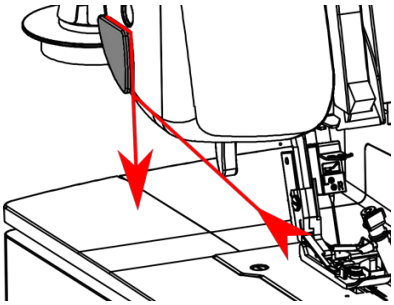
Thread cutter

After sewing, bring the thread up and pull it over the cutter from back to front.

Pull the thread down to cut it.

The chain of thread will be clamped in the thread cutter to be ready for the next piece

of fabric.



4 Sewing start

4.1Check before starting to sew

In order to start a project successfully, the following steps must be performed.

- The machine is switched on and the presser foot is raised.
- The fabric and the application have been selected.
- The thread has been selected.
- The needle size is matched with the thread type and the sewing project.
- The stitch has been selected.
- The machine settings basing on the stitch selection have been performed.
- Threading has been performed according to the stitch chart.
- All needle threads and looper threads as well lie under the presser foot to the back left.
- The threader cover is closed.

>Lower the presser foot.

>Press the foot control to start the sewing process.

– A thread chain is formed.

– If no thread chain is formed, the settings on the machine for the stitch must be checked.

4.2 Selecting the fabric

For a perfect sewing result, the quality of needle, thread, fabric and the optimal stitch play a vital role. This combination can have an effect on the sewing result.

>It is recommended to perform a test sample.

Fabric/stitch/application

The stitch recommendation serves the purpose, first and foremost, of obtaining a stitch selection for the current fabric and application. The suggested stitch can be preset according to the stitch chart or the quick reference card.

	Sewing	Finishing	Sewing and finishing	Rolled hem	Gathering	Decorative seam	Decorative hem
Lightweight woven	#1 4-Thread Overlock	#4 3-Thread Overlock (RN)	#7 3-Thread Narrow Seam	#8 3-Thread Rolled Hem	#1 4-Thread Overlock	#6 3-Thread Flatlock Narrow (RN)	#10 2-Thread Wrapped Overlock Narrow (RN)
Medium weight woven	#1 4-Thread Overlock	#4 3-Thread Overlock (RN)	#1 4-Thread Overlock	#8 3-Thread Rolled Hem	#1 4-Thread Overlock	#6 3-Thread Flatlock Narrow (RN)	#10 2-Thread Wrapped Overlock Narrow (RN)
Heavyweight woven	#1 4-Thread Overlock	#3 3-Thread Overlock Wide (LN)	#1 4-Thread Overlock	–	–	#5 3-Thread Flatlock Wide (LN)	#9 2-Thread Wrapped Overlock Wide (LN)
Light knits	#4 3-Thread Overlock (RN)	#4 3-Thread Overlock (RN)	#4 3-Thread Overlock (RN)	#8 3-Thread Rolled Hem	#1 4-Thread Overlock	#12 2-Thread Flatlock Narrow (RN)	#10 2-Thread Wrapped Overlock Narrow (RN)
Medium weight knits	#1 4-Thread Overlock	#4 3-Thread Overlock (RN)	#3 3-Thread Overlock Wide (LN)	–	–	#11 2-Thread Flatlock Wide (LN)	#9 2-Thread Wrapped Overlock Wide (LN)
Heavy knits	#1 4-Thread Overlock	#3 3-Thread Overlock Wide (LN)	#1 4-Thread Overlock	–	–	#11 2-Thread Flatlock Wide (LN)	#9 2-Thread Wrapped Overlock Wide (LN)

	Sewing	Finishing	Sewing and finishing	Rolled hem	Gathering	Decorative seam	Decorative hem
Fabric with a piled texture	#1 4-Thread Overlock	#4 3-Thread Overlock (RN)	#1 4-Thread Overlock	–	–	–	–
Jeans	#1 4-Thread Overlock	#3 3-Thread Overlock Wide (LN)	#1 4-Thread Overlock	–	–	#5 3-Thread Flatlock Wide (LN)	#9 2-Thread Wrapped Overlock Wide (LN)
Terry cloth	#1 4-Thread Overlock	#4 3-Thread Overlock (RN)	#1 4-Thread Overlock	–	–	–	–
Tulle and lace	#7 3-Thread Narrow Seam	#4 3-Thread Overlock (RN)	#7 3-Thread Narrow Seam	#8 3-Thread Rolled Hem	#1 4-Thread Overlock	#12 2-Thread Flatlock Narrow (RN)	#10 2-Thread Wrapped Overlock Narrow (RN)
Leather and vinyl	–	#3 3-Thread Overlock Wide (LN)	–	–	–	#5 3-Thread Flatlock Wide (LN)	–
Fur	–	–	#3 3-Thread Overlock Wide (LN)	–	–	–	–

4.3 Selecting the thread

A wide range of sewing and special overlock threads are manufactured in various sizes and in different fi ber combinations.

- The purchase of quality threads is recommended to achieve good sewing results.
- Use thread cones/spools which are suitable for overlock machines.

Thread breakage due to incorrect needle/thread or thread/looper proportion

The thread needs to glide smoothly through the respective thread guide.
The thread should be able to be threaded easily through the looper and the needle eye.
Thread thick decorative threads exclusively into the loopers, use the air threader circumvention if neces sary.In the case of thick threads, elongate the stitch length and reduce the thread tension.

Needle thread

Needle size and thread type must be carefully matched. The correct needle thickness depends on the selected thread as well as the fabric being used. The fabric weight and type determine the thread wei ght,needle size and point form.

Needle thicknesses of 70/9 - 90/14 can be used in the machine.

Thread type	Needle thickness
Polyester overlock thread no. 120	80 – 90
Polyester multifilament < no. 120	70 – 90
Overlock yarn	80 – 90
Decorative thread/yarn	80 – 90
Metallic thread	80 – 90

Needle/thread combination

	The needle/thread combination is correct, when the thread fits perfectly into the long groove and goes easily through the needle eye.
	The thread can break and skipped stitches can occur when there is too much clearance in the long groove and the needle eye.
	The thread can break and get stuck when the thread scrapes against the edge of the long groove not fit well into the needle eye optimally.

Looper thread

A wide variety of thread types can be used as looper threads. They can be threaded using the air threading system. The air threading circumvention must be used for thicker threads. (see page 72)

NOTICE

Damage by coated or waxed threads

Coated or waxed threads may lose some of their coating in the air threader pipes, resulting in permanent blocking of the pipes. Avoid use of coated or waxed threads.

4.4 Selecting the needle

The needles should be replaced regularly. Only a flawless needle point can achieve a clean stitch.

- Needle size 80: For any common applications. for mid-weight to heavy fabrics.
- Needle size 90: for heavy fabrics.
- Needle size > 80: In exceptional cases, only for light fabrics.

Select needle using the chart

Figure	Designation	Size	Characteristic	Material/Application
	**Coverstitch needle**	80/12 90/14	Needle with two thread grooves	Overlock and cover application s universal.
	**Jersey needle**	80/12 90/14	Mid-sized ball point	Overlock and cover application s in knits and knitwear.
	**Universal needle**	70/10 80/12 90/14	Slightly rounded point	For nearly all natural and synthetic fabrics (woven an d knitted).
	**Stretch needle**	75/11 90/14	Mid-sized ball point, speci al eye shape and groove	Jersey, tricot, knit and stretc h fabrics.
	**Jersey/Embroidery needle**	70/10 80/12 90/14	Mid-sized ball point	Knitwear, embroidery.
	**Jeans needle**	80/12 90/14	Point, narrow point, reinforced shaft	Heavy-weight fabrics such as jeans, canvas.
	**Microtex needle**	70/10 80/12 90/14	Especially sharp, narrow point	Mircro fiber fabrics and silk.
	**Quilting needle**	75/11 90/14	Slightly rounded, narrow point	Straight and topstitching.
	**Fine material needle**	70/10 90/14	Small ball point	Fine knitwear, embroidering on fine, delicate fabrics.
	**Metafil needle**	80/12	Long needle eye (2 mm) in a ll needle thicknesses	Sewing projects with metalli c threads.

Detect defective needles

The needles should be checked before sewing every time and replaced if necessary.

1.Bent needle
2.Damaged needle point
3.Blunt needle

4.5 Fixing fabric layers

If several layers of fabric are sewn together, they can be fixed by basting stitches with the sewing machin e or by pins.

>To prevent damage to the knife or pins, place the pins approximately 2 cm from the edge of the fabric or remove them continuously while sewing

5.Stitch selection

5.1 Stitch type

With this machine, 18 different stitch formations can be set. They are achieved by various configuration s of needles and mechanical settings, as summarized in the stitch chart.

Overlockstitch

The 3- and 4-Thread Overlock are standard overlockstitches, e.g. for sewing 2 fabric layers together. T he 2-Thread Overlock is ideal for finishing a fabric edge.

4-Thread Overlock

The 4-Thread Overlock is the most durable stitch thanks to the safety seam. The left and right overlock needle thread as well as the upper and lower looper thread are required for this stitch.

The overlock needle threads form two parallel stitch rows, which on the front side look like step stitch rows of a s ewing machine. On the wrong side, the overlock needle threads form «dots» to catch the under looper thread wh en the fabric is pierced, whereby the right overlock needle thread also serves as a safety seam.

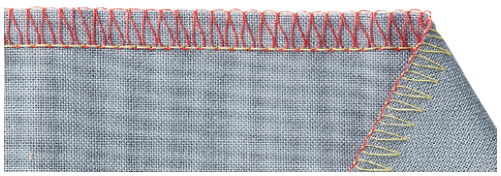
3-Thread Overlock

The 3-Thread Overlock is more stretchable than the 4-Thread Overlock as the safety seam is missing and is theref ore ideal for seams on knitted fabrics (LN wide) or fine fabrics (RN narrow).

Both stitch types are ideal for finishing cut edges, e.g. facings, hem edges and seam allowances which are ironed .

2-Thread Overlock

The 2-Thread Overlock is formed with an overlock needle thread (LN wide or RN narrow) and the under looper thread. The lower looper thread is guided to the right side of the fabric by means of the hooked-in upper looper converter. This overlock stitch is only suitable for edge finishing.



5.2 Select stitch by application

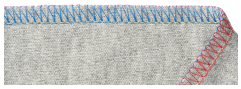
Seam

Seams are 2 or more fabric layers, which are usually placed right side on right side and sewn together.

Closed seam

3-Thread or 4-Thread Overlock stitches are suitable for closed seams, which loop around and sew toge ther both finishing edges.

Only the 4-Thread Overlockstitch with safety seam forms a reliable seam. This stitch is mainly chosen for garments made of knitted fabrics and for wide cut garments made of woven fabrics.

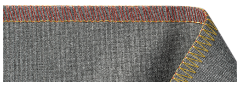
No.	Name	Stitch pattern
1	4-4-Thread Overlock wit h safety seam	
2	3-Thread Super Stretch	
3	3-Thread Overlock Wide (LN)	
4	3-Thread Overlock Narro w (RN)	
7	3-Thread Narrow Seam	

Flatlock

The flatlock forms loops on the upper side of the seam and stretch stitches on the underside.

>Thread and set the machine for 2- or 3-Thread Flatlock.
>Sew two layers of fabric together (wrong side on wrong side).
>Carefully separate the two layers of fabric.

– The two fabric edges now lie flat on top of each other at the stitch width of the flatlock.

No.	Name	Stitch pattern
5	3-Thread Flatlock Wide (LN)	
6	3-Thread Flatlock Narrow (RN)	
11	2-Thread Flatlock Wide (LN)	
12	2-Thread Flatlock Narrow (RN)	

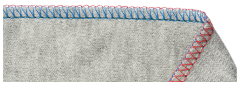
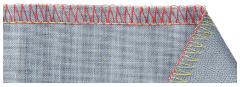
Open seam

An open seam cannot be produced with the overlocker without the help of a coverstitch or sewing machine.

Finish the fabric edge with the overlocker and then sew the finished fabric layers together, right side on right side.

Edge serging

Finishing edges are usually used as preparation for open seams.

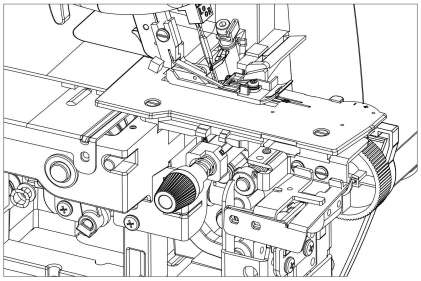
No.	Name	Stitch pattern
3	3-Thread Overlock Wide (LN)	
4	3-Thread Overlock Narrow (RN)	
8	3-Thread Rolled Hem	
9	2-Thread Wrapped Overlock Wide (LN)	
10	2-Thread Wrapped Overlock Narrow (RN)	
13	2-Thread Rolled Hem	
14	2-Thread Overlock Wide (LN)	
15	2-Thread Overlock Narrow (RN)	
28	2-Thread Blanketstitch Wide (LN)	
29	2-Thread Blanketstitch Narrow (RN)	
30	3-Thread Picot Stitch	

6.Machine settings

6.1 Knife

Knife on/off

Knife suspension



A wide range of fabric can be processed on this machine. When sewing extra heavy weight fabrics or multiple layers of fabric, it is recommended to secure the knife suspension mechanism as following:

Open the sewing table and tighten the set screw (1) using the hex screw driver provided in the accessory storage.

Before adjusting the cutting width, loosen the screw again by about 1/4 turn. Otherwise the fabric may not be cut properly.

In the factory setting this screw is loose.

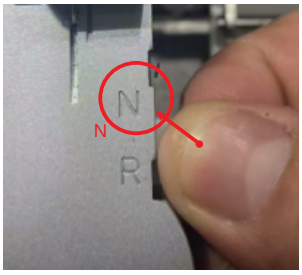
6.2 Rolled hem selection lever «N/R»

The adjustment positions for overlocking «N» and rolled hems «R» are marked in the stitch plate and can be set there for the desired application.

Overlocking «N»

During overlocking, the upper looper thread is laid along the stitch finger to form a constant distance from the finishing edge.

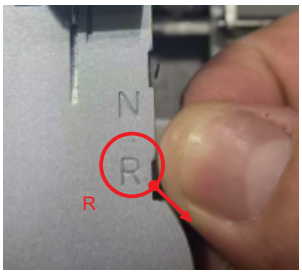
>Move the rolled hem selection lever to position «N».



Rolled hem «R»

By retracting the stitch finger, the loops of the upper and lower loopers thread are reduced and the fabric edge is rolled up. Roll hems are the ideal edge finishing for fine and medium-weight fabrics. These are particularly suitable for decorative finishings on scarves, evening gowns, lingerie, home textiles and as liningseams.

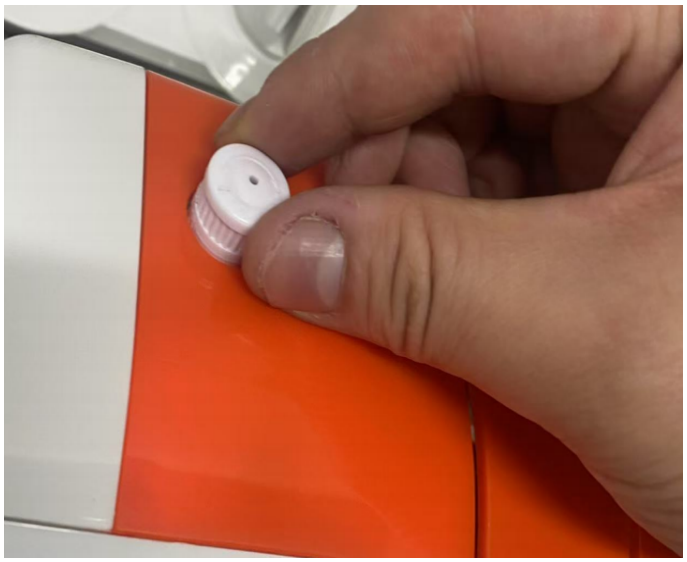
>Move the rolled hem selection lever to position «R».



6.3 Setting the presser foot pressure

The presser foot pressure of this machine is set in the default value «4» such that it is suitable for sewing medium-weight fabrics.

Most materials do not require adjustment of the presser foot pressure. However, there are some cases w here adjustment may help, such as when sewing very light and heavy fabrics.



1	Extra light	4	Standard setting
2	Light	5	Medium high
3	Medium light	6	High

>Reduce the presser foot pressure for light fabrics.
>Increase the presser foot pressure for heavy fabrics.
>Perform a sewing test to adjust the optimum sewing foot pressure for your sewing project.>To increa se the presser foot pressure, set the presser foot pressure wheel to a higher value.

>To reduce the presser foot pressure, set the presser foot pressure wheel to a lower value.

6.4 Adjusting the stitch width

Influence by the needle position

The stitch width can vary by the choice of needle position by 2 mm.

>To sew a wide stitch, insert the left needle.
>To sew a narrow stitch, insert right needle.

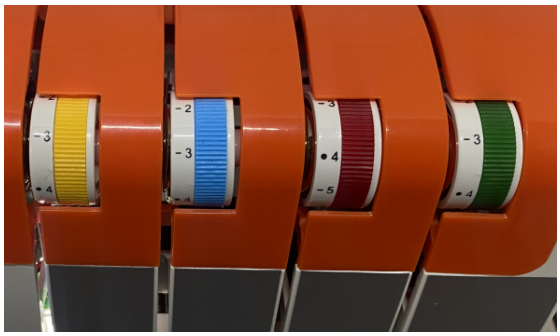
Influence by the knife position

The stitch width can vary by adjusting the knife position. The scale of the cutting width dial determines t he distance between the left overlock needle (LN) and the knife in mm. For the right overlock needle, th e set scale value is reduced by 2 mm.

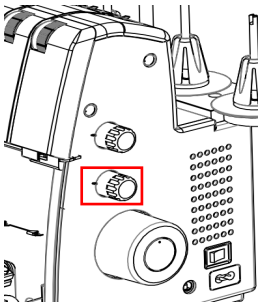
>To adjust the stitch width, set the cutting width dial between 5 – 9 mm.

6.5 Adjusting the thread tension

The thread tension has a considerable influence on each individual thread and its task to perform the stitch formation. The stitch chart provides a recommended default value for each stitch. This recomm endation can be optimized for different thread/fabric combinations.



>To reduce the thread tension, turn the thread tension adjustment dial down to a lower value.
>To increase the thread tension, turn the thread tension adjustment dial up to a higher value.



6.6 Setting the differential feed

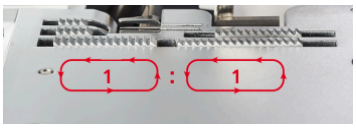
Differential feed prevents unwanted puckering or wavering in knitted or stretch fabrics as well as shifting of fabric layers. The two fabric feed dogs can be geared to each other so that the fabric is fed evenly while sewing and that neither wavering nor unintended gathering occurs. The differential feed is variable while sewing.

>Adjust the feeding ratio of the two feed dogs using the Differential feed setting.

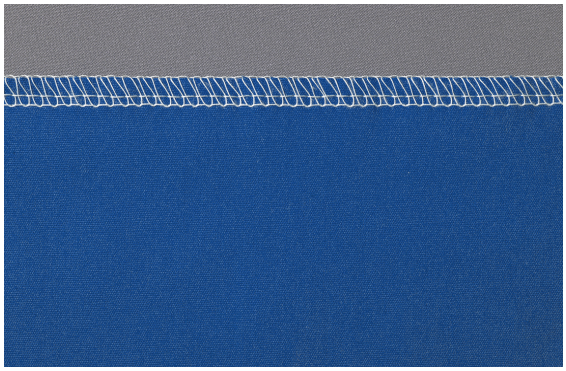
Value	Fabric	Result
2	highly elastic materials hand-knitted and thick wool fabrics	gathering, ruffle, gather
1.5	Jersey, sweatshirt, knits	slight ruffling, prevent seam waving
1	Woven fabric	Standard setting
0.7	Fine nylon tricots, densely woven fabric ,lining, satin	stretching, prevent seam puckering

The settings describe the movement ratio of the front to the rear feed dog. For default value 1, both feed dogs move by the same distance.

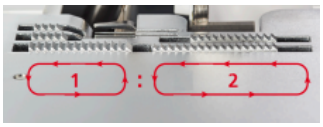
Default value 1



In a default value of 1, the machine achieves optimum sewing results with most applications. The Differential Feed in default setting 1 for flat and even seams.



Ruffling/Gathering 1.5 - 2



At a setting of 1.5 - 2 the front feed-dog (2) covers a longer distance than the rear feed-dog (1).

Gathering

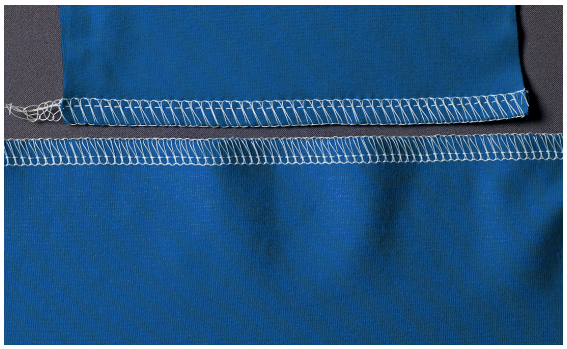
This setting can also be used to deliberately ruffle the material.

>To gather intentionally, increase Differential Feed to a value between 1.5 and 2. An elongated stit ch length enhances the gathering effect.

Gather to fitGather to fit

The material is compressed under the presser foot which helps to reduce waving.

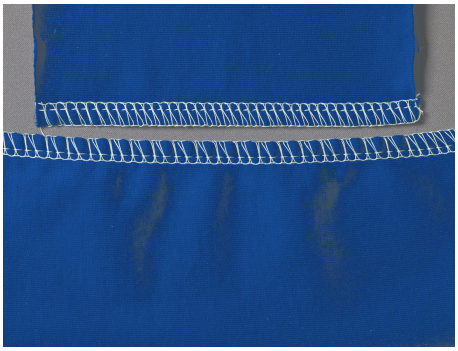
>To prevent waving increase Differential Feed to a value between 1 and 2.



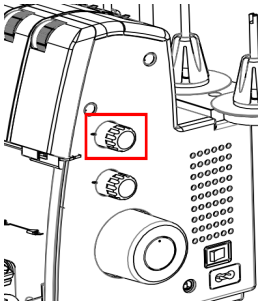
Stretching 0.7

The front feed dog (0.7) covers a shorter distance than the rear feed dog (1). The material is stretched u nder the presser foot which helps to reduce puckering. This setting can also be used to deliberately stret ch the material.

>To prevent seam puckering, reduce differential feed to a value between 0,7 and 1.



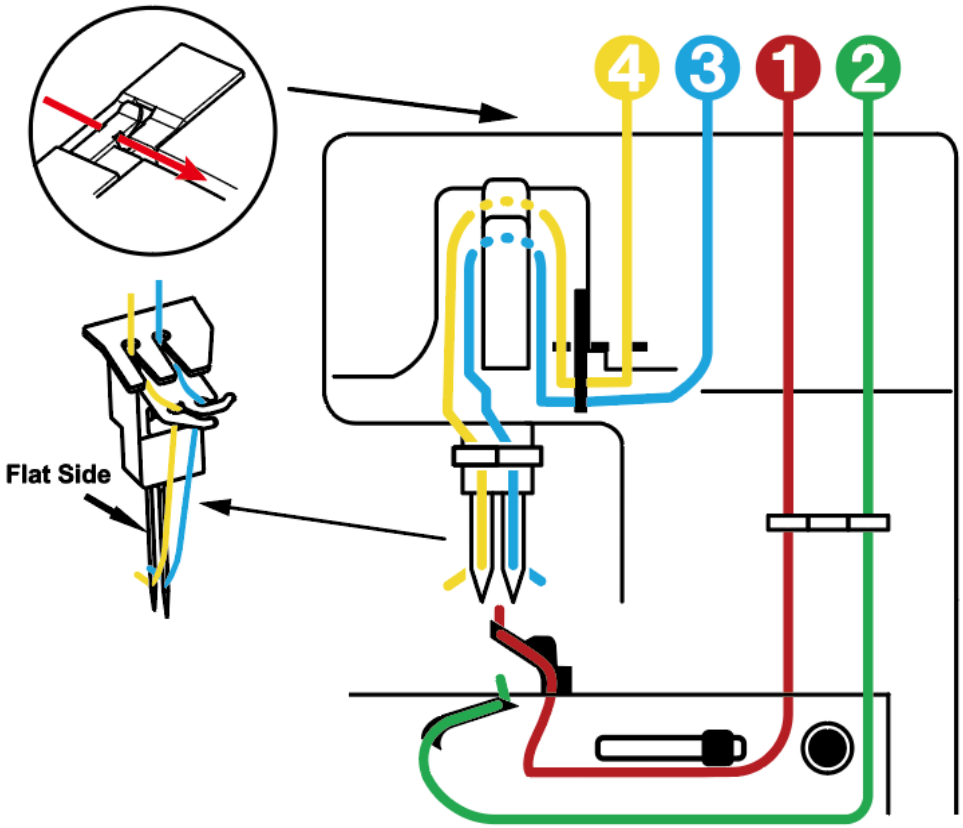
6.7 Setting the stitch length



The stitch length can be infinitely adjusted between 0.8 – 4.5 mm while sewing. The default stitch length is 2.5. A stitch length value recommendation for each stitch is shown in the stitch chart. A value of 1.5 and les sis used for rolled hems. The default roll hem is «R».

>To elongate the stitch, set the stitch length knob upwards to a higher value.
>To shorten the stitch, set the stitch length knob down to a lower value.

7 Threading



7.1 Preparing for threading

Before threading, make sure that the device is mechanically adjusted to the required stitch. Perform the required mechanical settings e.g. for needle, rolled hem selection lever and upper looper cover.The mac hine has color-coded threading paths. Correct threading is ensured when following the color markings.

7.1Preparing for threading

Prerequisite:

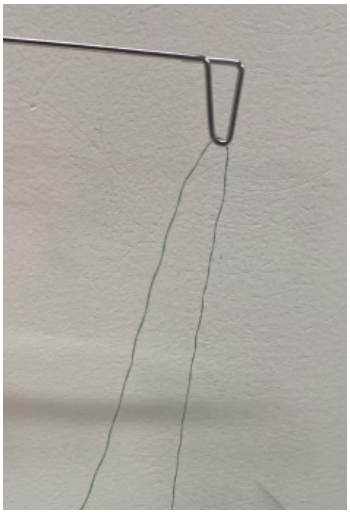
- Retractale thread guide extracted.
- The needles are at top position.
- All threads that are not needed for the particular stitch have been removed.

>Raise the presser foot.

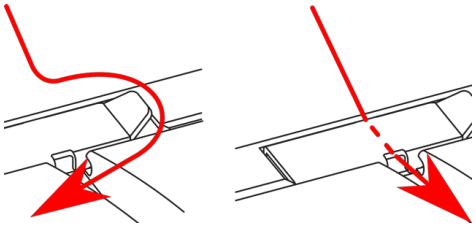
– The thread tensions are released. The thread can be inserted without resistan

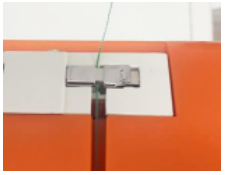
ce.>Place the thread cones on the respective spool pin.

>Place the thread from the back through the color-coded thread guide.



>Engage the thread by pushing downwards into the thread pre-tension with both hands and check by pulling it upwards to the back that it does not slide out of the thread pre-tension.





>Place the thread along the slot into the thread tension discs.

7.2 One-step air threader

NOTICE

Coated or waxed threads may lose some of their coating in the air threader pipes, resulting in permanent blocking of the pipes. Avoid use of coated or waxed threads.

Air threading adjustment is accomplished by turning the air threader connector in two possible positions. The ait threader connector should always be turned to the stop in the required direction.

The lower looper thread (green) is needed for each stitch. Depending on the stitch, the upper looper thread(red) must be additionally threaded.

Detailed information can be found in the stitch chart.

Pulse drive

If the needles are not in the uppermost position, the one-step air threader cannot be coupled.

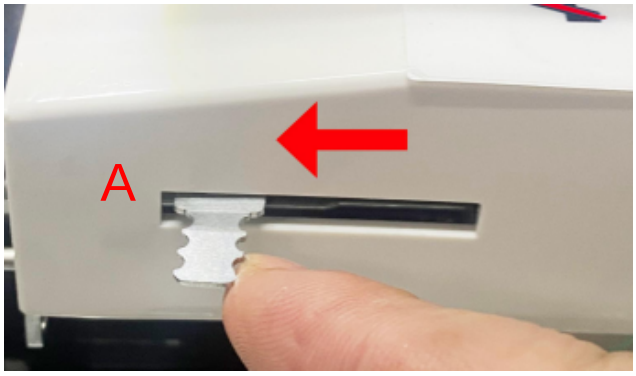
Threading the looper threads UL/green, LL/red

With the one-step air threader, both looper threads can be threaded in one simple step.

Prerequisite:

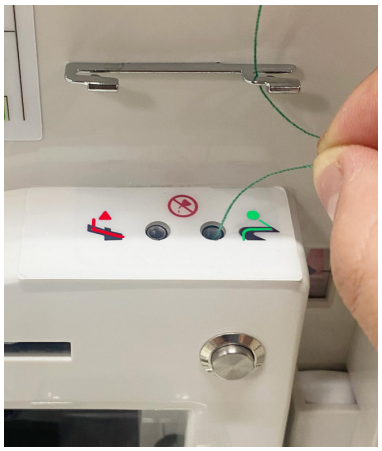
1.Open the threader cover and the looper cover.

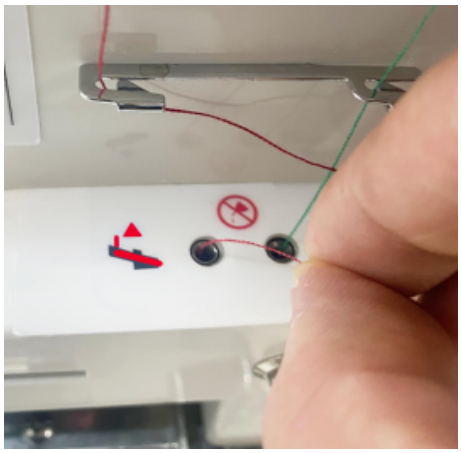
2.First, push the pneumatic pull rod to the left (A）.The air threader pipes are coupled.



3.Hold the thread end above the respective air threader nozzle.

>Pull a thread reserve of approx. 40 cm so that the thread can be completely drawn through the threading path



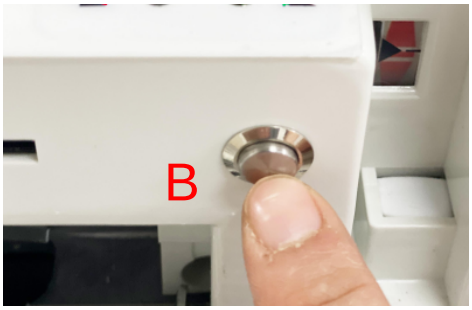


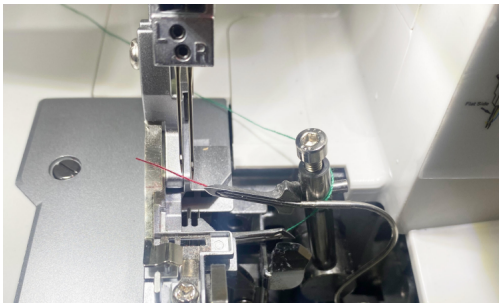
4.Press the control.(B) starts the air threading process.

– Automatic thread feed into the air threader starts.

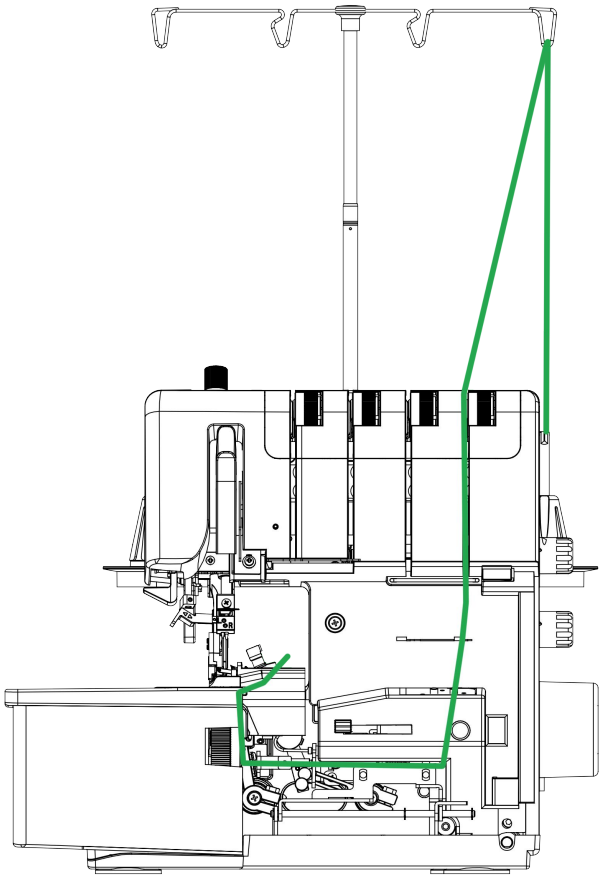
– The looper thread is shot through the air threader pipe and exits at the looper tip.

>Release the control as soon as the looper thread emerges from the looper eye.

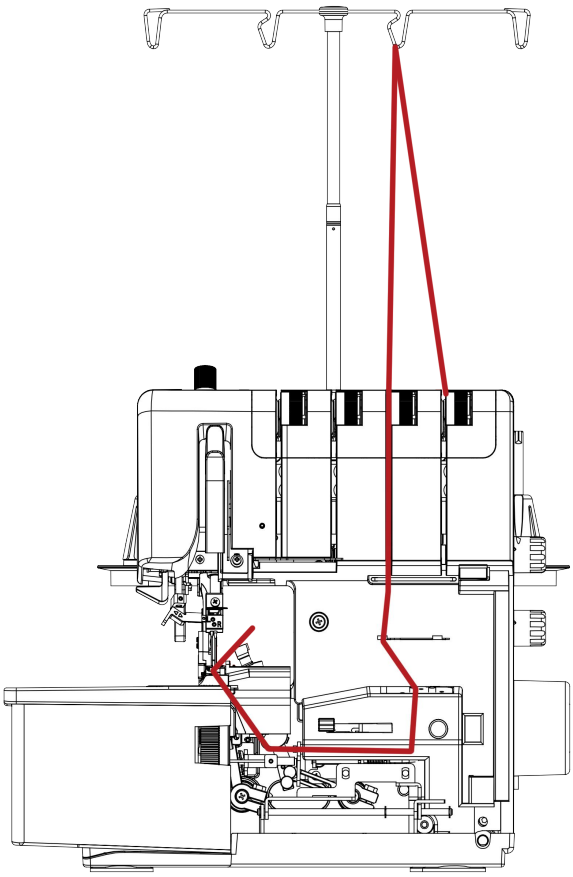




Place the looper threads under the presser foot to the rear left.



lower looper thread (green)



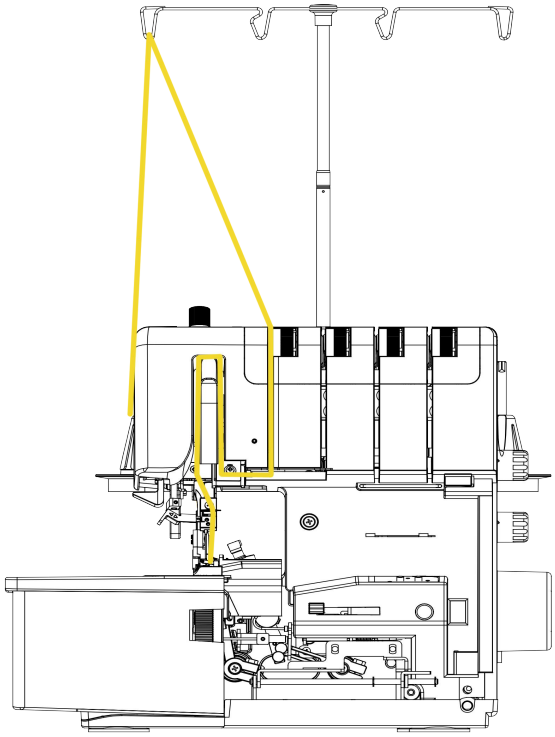
upper looper thre ad(red)

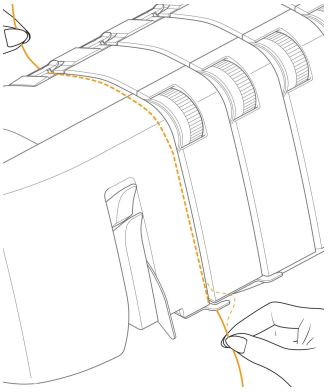
7.3 Threading the needle thread

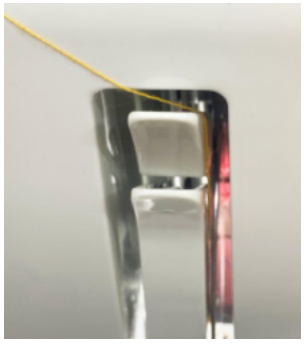
Threading the left needle thread LN/yellow

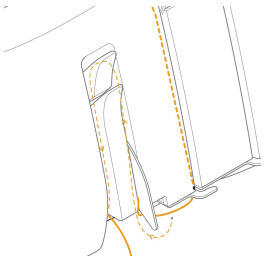
The left needle thread path is marked yellow.

1.Pull the thread beneath the thread guide plate to the left and up behind the yellow marking of the thread deflection finger





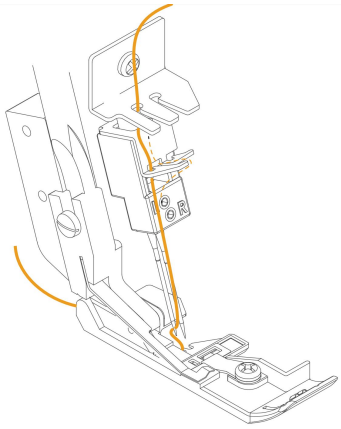




2.Place the thread over the upper needle thread take-up lever cover and pull it down.

3.Insert the thread into the left thread guide.

4.Hook the thread into the left thread guide of the needle holder.



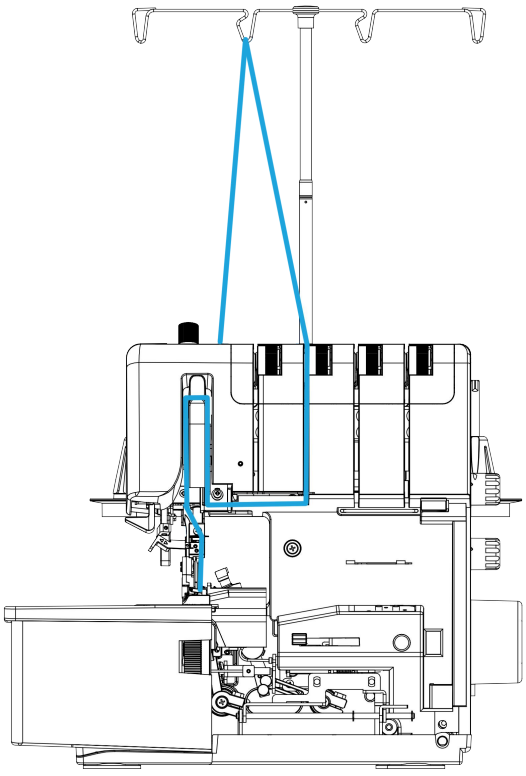
5.Thread the left overlock needle (LN).

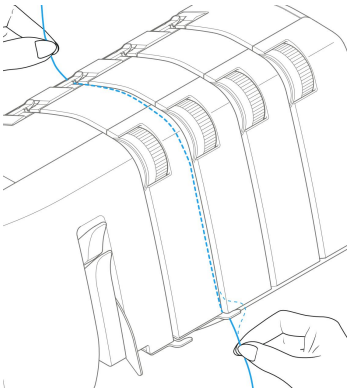
6.Place the thread beneath the presser foot to the back left.

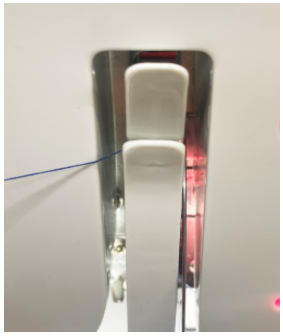
Threading the right needle thread RN/blue

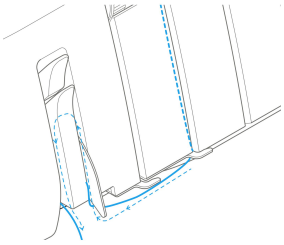
The right needle thread path is marked blue.:

1.Pull the thread beneath the thread guide plate to the left and up behind the blue marking of the thread deflection finger.





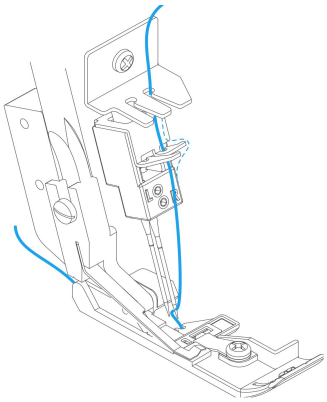




2.Place the thread over the upper needle thread take-up lever cover and pull it down.

3.Insert the thread into the right thread guide.

4.Hook the thread into the right thread guide of the needle holder.



5.Thread the right overlock needle (RN).

6.Place the thread beneath the presser foot to the back left.

7.4 Thread change

Tying thick thread

Tying on threads is often used for changing needle thread or looper thread.

To reduce friction, keep knots as small as possible.

NOTICE

Pulling a thread tie through the needle eye

The needle can be bent. A bent needle affects the stitch formation.

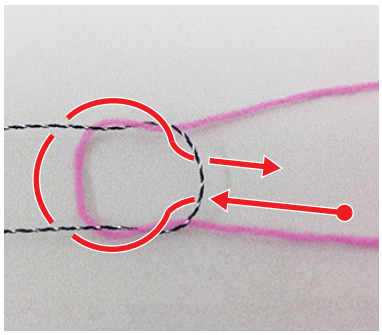
1.Cut the tie in front of the needle eye and thread the needle individually.

Example of tying

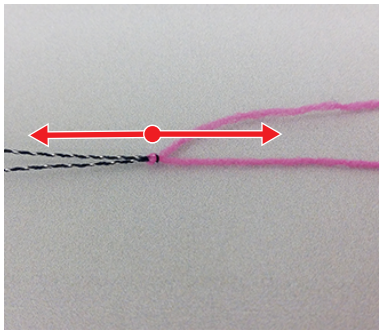
1.Form a loop with the dark thread.

2.Thread the pink thread end from beneath into the dark thread loop.

3.Guide the pink thread to the back around the two dark threads and from above through the loop .



4.Hold both thread ends and pull them apart.



Changing the needle thread

NOTICE

Pulling a thread tie through the needle eye

The needle can be bent. A bent needle affects the stitch formation.

1.Cut the tie in front of the needle eye and thread the needle individually.

2.Cut the thread above the thread cone.

3.Change the thread cone.

4.Tie the threaded thread to the new thread.

5.Pull the threaded end of the thread until the newly knotted thread is in front of the needle eye.>Cut off the new thread behind the knotting.

6.Remove the excess thread from the eye of the needle.

7.Thread the needle eye.

8.Place the thread beneath the presser foot to the back left.

Changing the looper thread

1.Cut the thread above the thread cone.

2.Change the thread cone.

3.Tie the inserted looper thread to the new thread.

4.Pull the end of the thread from the eye of the hook until the knot emerges.

5.Cut off the new thread behind the knotting.

6.Place the thread beneath the presser foot to the back left.

8 Perform a sewing test

To determine the optimal setting, a test sample should be sewn on a spare piece of the fabric to be used for your project.

The default values of the stitches represent recommendations that work for most standard applications.

Depending on your material combination (fabric, stitch, thread, needle) fine tuning may be possible to further optimise a stitch.

8.1 Overlockstitch sewing test

1.Raise the presser foot.

2.Push the fabric under the presser foot to the front of the knife so that the desired seam allowance is cut off.

3.Start sewing slowly. Guide the fabric gently as the machine automatically transports the material.

4.Sew beyond the fabric end so that a thread chain is formed.

5.Pull the thread chain over the thread cutter.

6.Assess the sewing test and make any necessary fine adjustments until the stitch setting matches the material combination.

7.Repeat the sewing test until you are satisfied with the stitch - then start your project.

4-/3-Thread Overlock

With a balanced stitch formation, the looper thread (green/red) are intertwined at the fabric edge.

The needle threads (blue/yellow) create two straight lines of stitches on the top side of the stitch and appear as dots on the bottom side of the stitch.

3-Thread Narrow Seam

With a balanced stitch formation, the looper thread (green/red) are intertwined at the fabric edge.

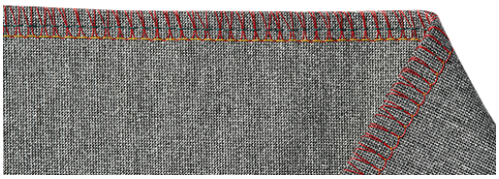
The needle thread (blue) is identifiable on the top side of the stitch as a straight line and on the bottom side of the stitch as points.

3-Thread Super Stretch / 2-Thread Wrapped Overlock

With a balanced stitch formation, the looper thread (red) loops around the cutting edge.

The needle threads (blue/yellow) create two straight lines of stitches on the top side of the stitch and appear as dots on the bottom side of the stitch.

The elasticity of the 3-Thread Super Stretch can be increased by shortening the stitch length or by reducing the needle thread tension depending on the material and application.

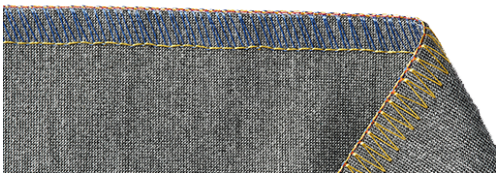


3-Thread Flat Seam

With a balanced stitch formation, the upper thread (green) is on the top side of the stitch related to the insertion into the fabric edge.

The lower looper thread (red) is parallel to the fabric edge.

The needle thread (yellow or blue) forms a «V» on the bottom side of the stitch related to the insertion into the fabric edge.

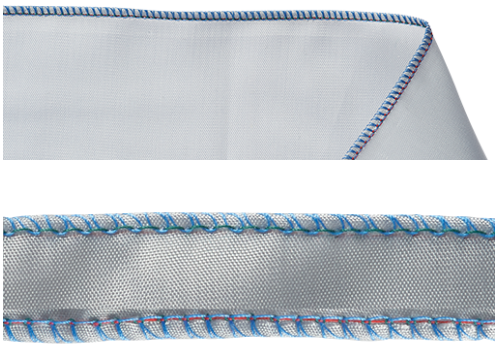


3-Thread Rolled Hem / 3-Thread Picot Stitch

With a balanced stitch formation, the upper looper thread (green) loops around the cutting edge.

The lower looper thread (red) lies straight along the needle thread on the bottom side of the stitch.

The needle thread (blue) is identifiable on the top side of the stitch as a straight line and on the bottom side of the stitch as points.



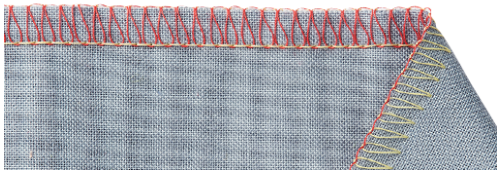
2-Thread Rolled Hem

With a balanced stitch formation, the looper thread (red) loops around the cutting edge. The needle thread (blue) is identifiable on the top side of the stitch as a straight line and on the bottom side of the stitch as
points.

2-Thread Flatlock / 2-Thread Overlock / 2-Thread Blanketstitch

With a balanced stitch formation, the lower looper thread (red) lies on the top side of the stitch from the needle penetration point to the fabric edge.

The needle thread (yellow or blue) forms a «V» on the bottom side of the stitch related to the insertion into the fabric edge.



9.Practical overlocking

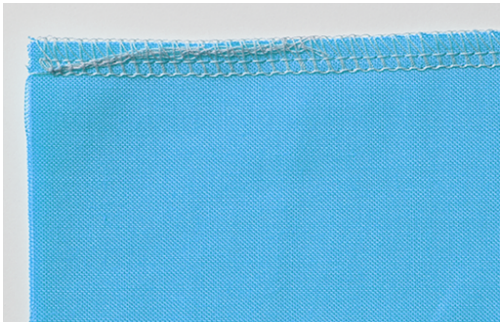
9.1Securing overlock stitches

The stitches are secured when they are overstitched.

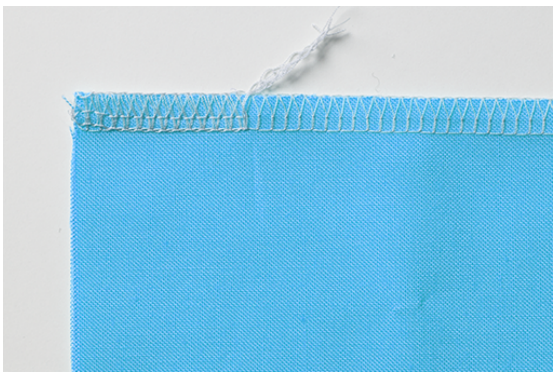
Securing stitches is particularly important when seam ends are not integrated with other seams or hems.

Sewing in the thread chain at the start of the seam

1.Form a thread chain at a length of 5 - 8 cm.
2.Place the fabric under the presser foot and sew a stitch into the fabric.
3.Lower needles with the back-kick function.
4.Raise the presser foot.
5.Now pull the newly formed thread chain carefully forward and place it on the sewing line to be sewn.
6.Lower the presser foot.
7.Sew approx. 4 cm over the thread chain.

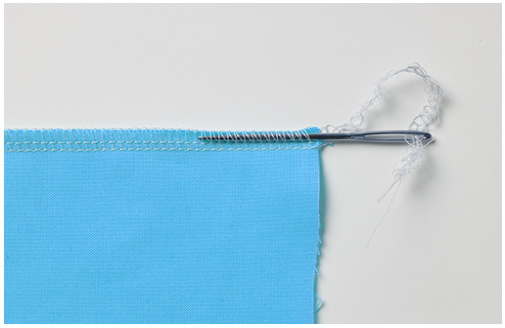


8.Sew the thread chain in at the end of the seam
9.At the end of the seam, sew one stitch over the fabric edge.
10.Raising the needle.
11.Raise the presser foot.
12.Pull the fabric a bit backwards.
13.Turn the fabric so that the wrong side points upwards.
14.Place the fabric beneath the presser foot so that the needles pierce the fabric at the first stitch.
15.Lower the presser foot.
16.Sew approx. 1.5 - 2.5 cm over the thread chain and make sure that the existing thread chain is not cut.
17.Finish the seam by sewing into the air.



Securing the thread chain

1.Sew a thread chain of about 10 cm beyond the end of the seam.
2.Pull the thread chain end through the looper threads using a loop flip, an awl or a sewing needle with a large eye



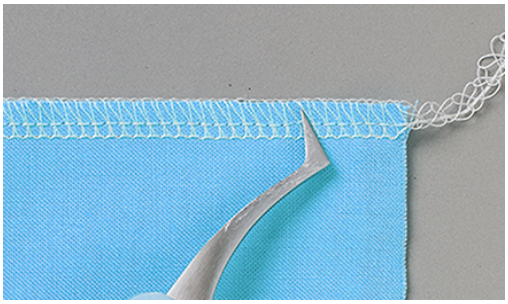
Tie on thread chain

1.Tie on the thread chain at the seam end, close to the fabric.

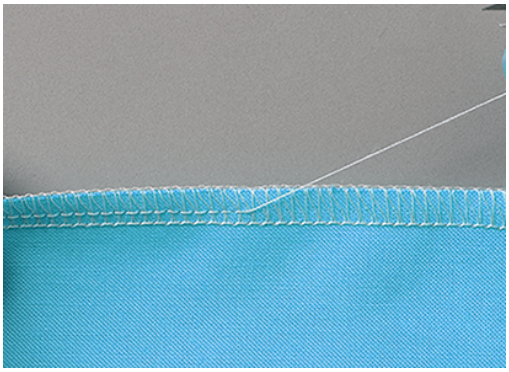
9.2 Removing a stitch

The thread loops of the looper and needle threads can be removed easily.

1.Pull the right overlock needle thread (RN) out of the thread chain with tweezers, starting from the seam end

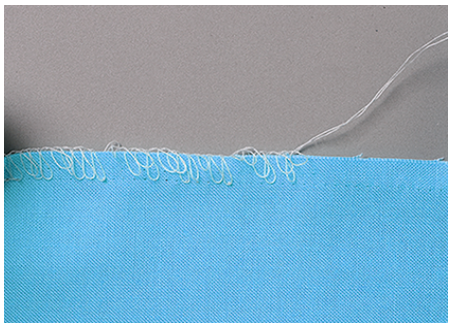


2.Pull the needle thread out of the seam.



3.With very long seams, cut the thread in the stitch and remove it step by step.
4.Remove the left overlock needle thread in the same way.

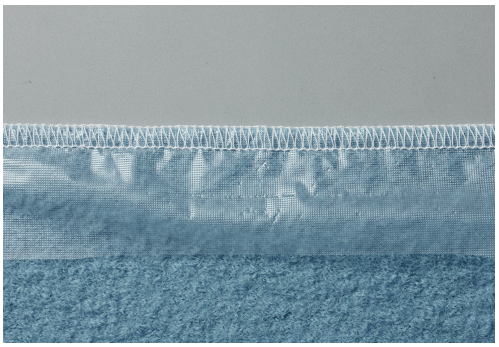
5.The looper threads lie around the fabric edge and can be removed easily.



9.3 Sew blanket stitch

This technique allows you to create a stitch similar to the popular blanket or Parisian stitch as an edge fi nish on woollen blankets, scarves or thick materials.

1.Preferably thread decorative thread into the looper and the needle.
2.Place water-soluble stabilizer on top of the fabric along the edge to be sewn.
3.Sew along the fabric edge.



4.After sewing, pull the stabilizer away from the fabric (to the right), pulling the needle thread to the edge of the fabric.

5.This makes the seam look like the typical hand-stitched blanket stitch.

6.Wash out the water-soluble stabilizer.

9.4 Gathering

Ruffling is a gathering or wrinkling of a seam.

By pulling the needle thread

Slightly different colors of the needle/looper threads facilitates separating the needle threads.The needle threads are usually the shorther ones in the thread chain.

1.Set the machine for a 3- or 4-Thread Overlock.
2.Set the Differential Feed at default.
3.Sew the fabric with this side up on which the ruffling is wanted.
4.Leave a long thread chain at seam end.
5.Separate the needle thread/threads from the thread chain.
6.Pull the needle thread(s) and evenly spread the wrinkles along the seam.

7.By adjusting the Differential Feed

8.Set the machine for a 3- or 4-Thread Overlock.
9.Set the Differential Feed to «2».
10.Set the stitch length to «4».
11.Sew the fabric with this side up on which the ruffling is wanted.
12.Sew beyond the end of the fabric.

9.5 Sew outer corners

Method 1

1.Set the machine for a 2-, 3- or 4-Thread Overlock.

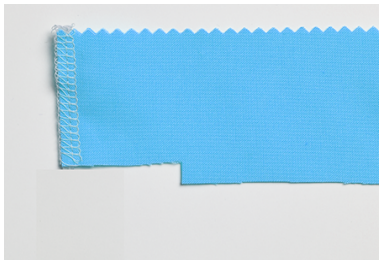
2.Sew along the edge of the fabric beyond the corner.

3.Start a new edge and sew over the previously sewn edge.

4.Secure the thread chain.

Method 2

1.Trim the allowance for the cutting width of the following corner in the sewing direction (presser foot length).



2.Sew one stitch over the fabric edge and stop.The needles are at the top position.

3.Raise the presser foot.

4.Push the rolled hem selection lever to position «R».The loops are loosened from the stitch finger.

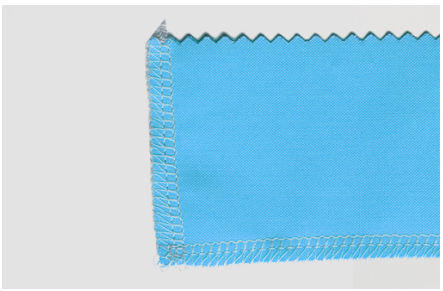
5.Turn the fabric counterclockwise.The trimmed edge of the fabric is in the sewing direction under the presser foot.

6.Push the rolled hem selection lever to position «N».

7.Use the back-kick function to pierce the fabric with the needle.

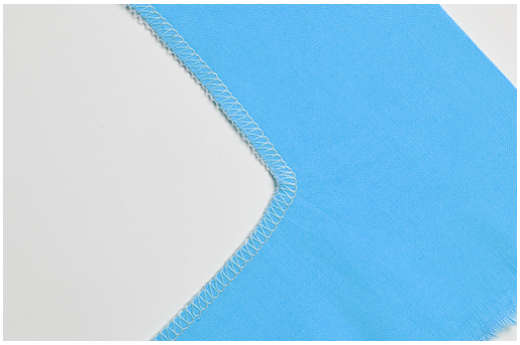
8.Pull back and tighten loose threads of the thread spools on the thread spool stand.

9.Lower the presser foot and continue sewing.



9.6 Sew inner corners

1.Set the machine for a 2-, 3- or 4-Thread Overlock.



2.Draw sewing lines on both sides of the corner about 5 cm long with the fabric pen.

3.Sew the seam until the knife reaches the corner.

4.Use the back-kick function to place the needle in the fabric.

5.Raise the presser foot.

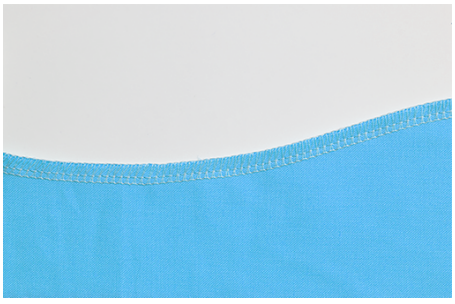
6.Carefully pull the corner to a straight line and fold the fabric forwards.

7.Lower the presser foot.

8.Continue sewing until the needles reach the corner.

9.Lay the folds back and continue sewing.

9.7 Sew inner curves



Inner curves appear on necklines, facings and armholes. Time-consuming clipping or trimming ca n be avoided by overlocking the fabric edge.

Prerequisite:

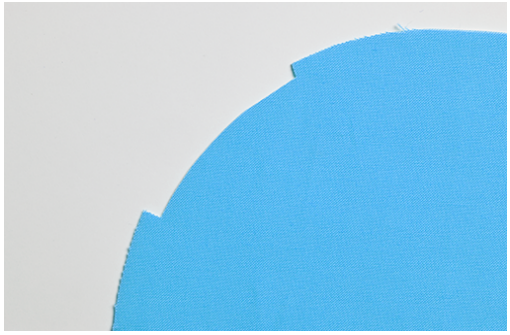
1.The 4- or 3-Thread Overlock stitch is set..

2.While sewing, stretch the curve carefully so it is straight.

9.8 Sew outer curves and circles

Due to the Differential Feed, the overlock seam can be pulled or pushed into shape for flat, round edges.

1.Cut away the seam allowance at one point in the length of the sewing foot .



2.Start and end the seam at the cut seam allowance.

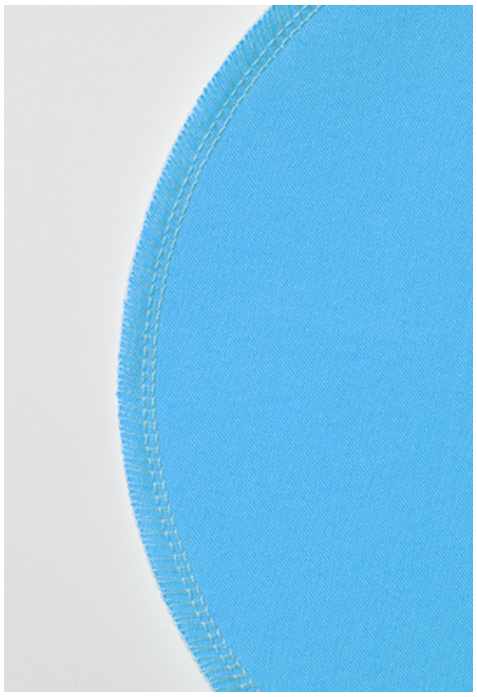
3.Wavering; Set the Differential Feed to 1.5 – 2

4.Ruffling; Set the Differential Feed to 0.7 – 1.

5.At the seam end sew 1 – 2 stitches over the seam beginning.

6.Pierce with the needle and lift the presser foot.

7.Turn the fabric away from the presser foot to the left.



8.Lower the presser foot and sew over and beyond the fabric.

10 Appendix

10.1Care, cleaning and maintenance

NOTICE

Damage by cleaning with compressed air

Cleaning using aerosol sprays or compressed air may cause permanent damage to your machine.
1.Remove fabric scraps and thread remnants using a vacuum cleaner with soft top piece.

Care of the machine

The operational life span depends on the maintenance of the machine. The machine can be dusted off with a moist cloth without cleaning agents.
Free the sewing area from fabric and thread scraps regularly after sewing.

1.Needle, needle bar
2.Presser foot
3.Feed dog (from above)

Knife

Free the looper area from fabric and thread scraps.

1.Brush
2.Tweezers
3.Vacuum with soft attachment

Cleaning the air threader pipes

NOTICE

Damage by fluids in the air threader system

The air threader pump may be damaged permanently if liquids infiltrate the system.

Protect the air threader nozzles from liquids.

Now and then, dust and thread remnants must be removed from all air threader pipes.

Prerequisite:

Use a thick thread at a length of about 1 m.

1.Thread the thread in the air threader nozzle.
2.To clean the air threader pipe, hold the thread at both ends and pull it to and fro.
3.Remove the thread at the looper end in thread feed direction.
4.Repeat this process for the other air threader nozzles using a clean thread.

Cleaning the looper area

While overlocking, fabric and thread remnants remain in the looper area, remove these remnants regularly.

Prerequisite:

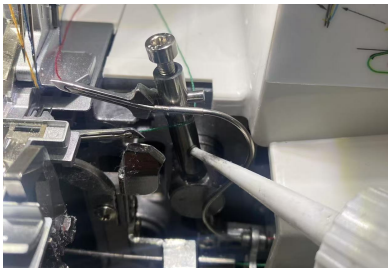
1.The presser foot is up.
2.The needles are at top position.
3.Remove the presser foot .
4.Remove the screws of the stitch plate with the screwdriver.
5.Remove the stitch plate from the freearm.
6.For thorough cleaning, remove the freearm cleaning cover.
7.Use the brush to remove all dust particles and fabric scraps.
8.Attach the freearm cleaning cover after cleaning again.
9.Screw the stitch plate back on place.
10.By slowly turning the handwheel, ensure that the knife, needle and feed dogs are not impair in their movement.

Cleaning the suction feet

Regular cleaning of the suction feet prevents the machine from shifting on the table at high sewing speed.
Use a damp cloth to remove dust and threads remnants.

Oiling the machine

1.After frequent use, lubricate the upper looper joint with 1 – 2 drops of the supplied serger oil



10.2 Storing and transporting the machine

Storing the machine

The correct storage of the machine over a longer period of time has an influence on its lifespan and functionality.

1.To store the machine, the original packaging supplied must be used.
2.Don't store the machine outdoor.
3.Protect the machine against climatic influences.

Transporting the machine

For a relocation or a longer transport of the machine, the following actions should be carried out.

1.Retract the spool reel stand completely downwards.
2.Lower the presser foot.
3.Remove all connecting cables.
4.Lift and transport at the carry handle and the transport carry groove under the handwheel.
5.For a longer transport, protect the machine and transport it in its original packaging.

Troubleshooting		
Failure	**Cause**	**Recommendation**
Irregular stitch	Incorrect thread tension.	Adjust the thread tension.
	Incorrect needle size.	Match needle size with fabric/thread.
	Threading incorrect.	Rethread the machine.
	Fabric has been pulled.	Don't pull the fabric; guide lightly.
	Loose presser foot.	Attach the presser foot properly.
	Air threader pipes dirty.	Clean the air threader pipes.
Needle breaks	Needles are defective.	Replace needles.
	Fabric has been pulled.	Don't pull the fabric; guide lightly.
	Incorrect needle size.	Replace the needle.
	Needle fit incorrect.	Match needle size with fabric/thread.
	Loose presser foot.	Attach the presser foot properly.
Unintended seam gathering	Incorrect thread tension.	Adjust the thread tension.
	Needles are defective.	Insert a new needle.
	Differential feed incorrect.	Set the Differential feed to 0.7 - 1.
Unintended seam waving	Differential feed incorrect.	Set the Differential feed to 1 - 2.
Skipped stitches	Incorrect needle size.	Match needle size with fabric/thread.
	Threading incorrect.	Rethread the machine.
	Defective needle	Insert a new needle.
	Needle fit incorrect.	Insert the needle correctly.
Thread breakage	Threading incorrect.	Thread correctly.
	Needle damaged.	Insert a new needle.
	Incorrect needle size.	Replace the needle.
	Incorrect thread tension.	Adjust the thread tension.
	Thread tangles above the thread cone.	Check whether the thread cone can unwind freely. Use the spool net.
	Retractable thread stand is not fully extended.	Raise the retractable thread stand fully.
The machine doesn't sew	No power supply.	Connect the machine.
	Power switch off.	Switch the machine on.
	Machine is overheated.	Switch the machine off and let it cool down for 10 - 15 min.
	Air threader connector	Set the air threader connector
Machine runs slowly and then stops	Pulse drive	Close the threader cover.
Fabric piles up	Incorrect presser foot pressure.	Reduce the presser foot pressure.
Acoustic signal	The air threader doesn't work.	Swing the presser foot in.
	Machine is not ready for sewing.	Lower the presser foot.
		Close the threader cover and the looper cover.
		Set needle to topmost position.

10.3 Specifications

Designation	Value	Unit
Number of stitches	16	
Number of loopers	2	
Number of needles	1 – 2	
Needle thickness	70 – 90 (10 – 14)	
Differential feed	0.7 – 2	
Maximum fabric thickness	6,0 (0,23)	mm (in)
Stitch length	0,8 – 4,5 (0,03 – 0,16)	mm (in)
Cutting width of the left overlock needle LN	5 – 9 (0,19 – 0,35)	mm (in)
Cutting width of the right overlock needle RN	3 – 7 (0,11 – 0,27)	mm (in)
Sewing light	6	LED
Minimum sewing speed	400	Stitches per minute
Maximum sewing speed	1 200	Stitches per minute
Safety features	Safety switch for threader cover and presser foot lifter	
Boxedsizemm	480x390x387	mm
Weight of the machine	9.4	kg
Boxed weight	12.1	kg
Energy consumption	100	Watt
Input voltage	110 – 240 (50 – 60)	Volt (Hz)